



[7590-01-P]

NUCLEAR REGULATORY COMMISSION

[Docket No. 55-70188; NRC-2020-0075]

In the Matter of Dr. Melinda Krahenbuhl, Reed Research Reactor, Portland, Oregon

AGENCY: Nuclear Regulatory Commission.

ACTION: Order; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing an Order to Dr. Melinda Krahenbuhl to suspend NRC License No. SOP-70678-1 issued to Dr. Krahenbuhl pursuant to NRC regulations and prohibit Dr. Krahenbuhl's involvement in NRC-licensed activities for a period of 3 years. The Order is effective on the date of issuance.

DATES: The Order was issued on March 16, 2020.

ADDRESSES: Please refer to Docket ID **NRC-2020-0075** when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- **Federal Rulemaking Web Site:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2020-0075**. Address questions about NRC docket IDs in Regulations.gov to Jennifer Borges; telephone: 301-287-9127; e-mail: Jennifer.Borges@nrc.gov. For technical questions, contact the individual(s) listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **NRC's Agencywide Documents Access and Management System**

(ADAMS): You may obtain publicly-available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "Begin Web-based ADAMS Search." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209,

301-415-4737, or by e-mail to pdr.resource@nrc.gov. The ADAMS accession number for each document referenced (if it is available in ADAMS) is provided the first time that it is mentioned in this document.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: Robert Fretz, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington DC 20555-0001; telephone: 301-287-9235, e-mail: Robert.Fretz@nrc.gov.

SUPPLEMENTARY INFORMATION: The text of the Order is attached.

Dated at Rockville, Maryland, this 17th day of March 2020.

For the Nuclear Regulatory Commission.

George A. Wilson,

Director,

Office of Enforcement.

**Attachment – ORDER SUSPENDING NRC LICENSE AND PROHIBITING
INVOLVEMENT IN NRC-LICENSED ACTIVITIES**

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

| | | |
|------------------------|---|-----------|
| In the Matter of |) | |
| |) | IA-19-035 |
| Dr. Melinda Krahenbuhl |) | |
| |) | |

ORDER SUSPENDING NRC LICENSE AND
PROHIBITING INVOLVEMENT IN
NRC-LICENSED ACTIVITIES

I.

Dr. Melinda Krahenbuhl is employed as the Director, Reed Research Reactor (RRR), which is located on the campus of Reed College in Portland, Oregon. Dr. Krahenbuhl holds U.S. Nuclear Regulatory Commission (NRC or Commission) License No. SOP-70678-1 issued with an effective date of December 13, 2017, pursuant to Part 55 of Title 10 of the *Code of Federal Regulations* (10 CFR). The RRR licensee, Reed College, holds Renewed Facility Operating License (FOL) No. R-112 (Docket No. 50-00288) issued by the NRC on April 24, 2012, pursuant to 10 CFR Parts 30, 50, and 70. The license authorizes the operation of the RRR facility in accordance with the conditions specified therein.

II.

Two investigations were conducted by the NRC Office of Investigations (OI) related to the operation of Reed College's RRR facility. The purpose of the investigations was to determine whether Dr. Krahenbuhl, as the RRR Director, willfully provided to the NRC incomplete or inaccurate information associated with an application of a student (Student #1) for a 10 CFR Part 55 reactor operator (RO) license, and whether the RRR Director willfully provided incomplete or inaccurate information regarding a second student (Student #2) who applied for a 10 CFR Part 55 license (a senior reactor operator license). One of the investigations also considered whether the RRR Director willfully violated an RRR Renewed FOL Condition and other NRC requirements regarding facility access control. The investigations were completed on March 15, 2019 (OI Investigation 4-2016-022), and September 26, 2019 (OI Investigation 4-2017-023).

Based on OI Investigation 4-2016-022, the NRC determined that Dr. Melinda Krahenbuhl, as the RRR Director, deliberately provided incomplete and inaccurate information to the NRC regarding a student's application, dated April 21, 2015, for a RO license pursuant to 10 CFR Part 55. Based on OI Investigation 4-2017-023, the NRC determined that Dr. Krahenbuhl deliberately provided incomplete and inaccurate information to the NRC regarding a different student on May 7, 2015; and engaged in deliberate misconduct by deliberately violating facility access control procedures that implement the RRR physical security plan, causing the licensee to violate Reed College Renewed FOL R-112, Condition 2.C.(3). That condition requires Reed College to maintain and fully implement all provisions of the RRR physical security plan.

In a letter dated November 20, 2019, Agencywide Documents Access and Management System (ADAMS) Accession No. ML20044E056, the NRC notified Dr. Krahenbuhl of three apparent violations of 10 CFR 50.5, "Deliberate misconduct," which the NRC was considering for escalated enforcement action in accordance with the NRC Enforcement Policy. This rule prohibits an employee of an NRC licensee (i.e., Reed College) from engaging in deliberate misconduct that causes the NRC licensee to be in violation of any rule, regulation, or order; or any term, condition, or limitation of any license issued by the Commission; it also prohibits a licensee employee from deliberately submitting to the NRC information that the person knows to be incomplete or inaccurate in some material respect. In the letter, the NRC provided Dr. Krahenbuhl an opportunity to address the apparent violations in a predecisional enforcement conference (PEC). On January 10, 2020, the NRC held a PEC at its NRC Headquarters office in Rockville, Maryland, with Dr. Krahenbuhl and her attorney to discuss the apparent violations.

OI's investigation (4-2016-022) documented that on March 10, 2015, a physician contracted by Reed College conducted a medical examination of a student at Reed College (Student #1) applying for an NRC RO license. The medical examination was conducted pursuant to 10 CFR 55.21, "Medical examination," whereby the physician is to determine whether the applicant for a license meets the requirements of 10 CFR 55.33(a)(1). Section 55.33(a)(1) requires that the applicant's medical condition and general health not "adversely affect the performance of assigned operator job duties or cause operational errors endangering public health and safety." The physician determined that the applicant needed to undergo a psychological evaluation before

determining whether the applicant met the requirements of Section 55.33(a)(1) and was medically qualified for the position of RO. The physician also determined that, related to the applicant's pulmonary condition, the applicant was medically qualified from a physical and internal medicine standpoint with a "solo operation is not authorized" restriction. However, a determination that Student #1 met the medical requirements for licensed operations still required further psychological evaluation. The physician provided three documents explaining his determinations to Dr. Krahenbuhl.

Despite receiving the physician's supporting documentation, Dr. Krahenbuhl disregarded the physician's medical determination and, contrary to 10 CFR 50.5(a)(2) and 55.23 requirements, signed and certified the applicant's NRC Form 396 on April 21, 2015, attesting that the applicant met the medical requirements for licensed operators at RRR with a "solo operation is not authorized" restriction based on a pulmonary condition. In addition, she certified that a physician determined that the applicant's physical condition and general health were such that the applicant's medical condition would not be expected to cause operational errors endangering public health and safety. The applicant had not received the psychological evaluation that the physician stated was required prior to satisfying the medical requirements for an RO license. Dr. Krahenbuhl then submitted the NRC Form 396 containing incomplete and inaccurate information to the NRC. Furthermore, the NRC Form 396, which the NRC received on April 28, 2015, did not include the appropriate supporting medical evidence provided by the physician for a "solo operation is not authorized" restriction, as required by 10 CFR 55.23(b). Student #1 was permitted to take the written and operational portion of the RO examination in May 2015, in part, because a pulmonary condition was the only medical issue known to the NRC that could explain the "solo operation is not authorized"

restriction identified on the student's application when the RO license examination was administered. The investigation further noted that the assigned NRC examiner made multiple attempts to obtain the required supporting medical documentation that would explain the applicant's "solo operation is not authorized" designation; however, Dr. Krahenbuhl did not provide the requested documentation to the NRC until June 11, 2015. It was at that time the NRC first became aware of additional medical information and of the physician's determination that the applicant needed further evaluation before being deemed medically qualified for the position of RO. Had the NRC received the supporting medical evidence when Dr. Krahenbuhl submitted the NRC Form 396 for Student #1 in April 2015, Student #1 would not have been permitted to take the RO examination without further NRC evaluation.

OI Investigation No. 4-2017-023 documented that, on April 9, 2015, a second Reed College student (Student #2) who was a licensed RO at the RRR was involved in an incident that caused the student to take a medical leave of absence from Reed College. Student #2 remained on the medical leave of absence from April 9, 2015, through January 2017. On April 10, 2015, Dr. Krahenbuhl removed Student #2's unescorted access to the RRR and removed the student from the control room access list (CRAL).

Shortly after the April 9, 2015, incident, Student #2 and Dr. Krahenbuhl had a conversation where they, in part, discussed the student's ability to take the upcoming senior reactor operator (SRO) licensing exam. Student #2 testified that, during this conversation, the student disclosed certain medical information to Dr. Krahenbuhl. As the RRR Director, Dr. Krahenbuhl knew that this potentially disqualifying information

would likely cause the student not to meet certain requirements of the American National Standards Institute (ANSI)/American Nuclear Society (ANS) standard. (Reed College also incorporated ANSI/ANS 15.4-1988 (R1999), "Selection and Training of Personnel for Research Reactors," in the technical specifications (Section 6.1.4) of its license.)

On May 7, 2015, the day before Student #2's SRO license exam at RRR, Dr. Krahenbuhl met with an NRC examiner. Dr. Krahenbuhl informed the NRC examiner that Student #2 was fit to take the exam. Although there were several opportunities to do so, Dr. Krahenbuhl did not disclose to the NRC examiner the potentially disqualifying information, that Student #2 was on medical leave at the time, and that Dr. Krahenbuhl had removed the student's unescorted access to the RRR. Because of Dr. Krahenbuhl's actions as described above, Student #2 was permitted to take the SRO exam on May 8, 2015, which Student #2 ultimately passed, and the NRC issued an SRO license to the individual on July 30, 2015, based on incomplete and inaccurate information. The NRC did not become aware of the incomplete and inaccurate information until February 2017, when Dr. Krahenbuhl submitted an NRC Form 396 with updated medical information for Student #2 and indicated that it was "for information only." Had Dr. Krahenbuhl provided the NRC with complete and accurate information about Student #2 before the SRO exam, the student would not have been allowed to take the exam or continue to hold an RO license without further NRC evaluation.

After Dr. Krahenbuhl removed Student #2's unescorted access to the RRR on April 10, 2015, when the student took a leave of absence, she gave Student #2 a key to the RRR facility on May 8, 2015, to facilitate the administration of the SRO license exam. By giving Student #2 the key, Dr. Krahenbuhl provided Student #2 unescorted access to

the facility, including access to vital areas, contrary to the licensee's procedures that required Student #2 to be escorted in the vital areas because Student #2 was not on the unescorted access lists for the RRR Control Room or Vital Area. These procedures implement requirements of the RRR physical security plan. Reed College Renewed FOL R-112, License Condition 2.C.(3), requires the licensee to maintain and fully implement all provisions of the physical security plan. Thus, Dr. Krahenbuhl's deliberate violation of the facility access control procedures that implement the RRR physical security plan caused the licensee to violate License Condition 2.C.(3).

During the PEC, Dr. Krahenbuhl acknowledged (through her representative) that the information regarding Student #1 and Student #2 that she provided to the NRC was not complete and accurate in all material respects; however, she stated that she did not intend to deliberately mislead the NRC. The NRC reviewed the information provided at the PEC with the information from the investigations and determined that Dr. Krahenbuhl's assertion that her actions were not willful is not credible. A preponderance of the evidence in the record demonstrates that she, in fact, knew that the medical fitness information she provided to the NRC regarding Student #1 and Student #2 was not complete and accurate in all material respects.

Accordingly, the NRC has determined that Dr. Krahenbuhl's actions were a violation of 10 CFR 50.5, "Deliberate misconduct." The NRC considers Dr. Krahenbuhl's actions significant because she deliberately misled the NRC regarding the qualifications of applicants for an RO and an SRO license. The misleading information and information that was withheld was material to the NRC's determination whether the applicants' medical conditions and general health would adversely affect the

performance of assigned operator job duties or cause operational errors endangering public health and safety. The NRC also considers deliberate violations of its facility security and access control requirements significant because persons granted unescorted access to the control room and other vital areas of the RRR facility must demonstrate a pattern of trustworthy and reliable behavior to provide the assurance that the facility is protected from potential radiological risk from insider threats, and that their actions will not adversely impact the common defense and security or the public health and safety.

III.

Based on the above, the NRC has determined that Dr. Melinda Krahenbuhl, as the Director of the RRR, provided incomplete and inaccurate information to the NRC on multiple occasions in violation of 10 CFR 50.5(a)(2). Dr. Krahenbuhl also engaged in deliberate misconduct in violation of 10 CFR 50.5(a)(1) by deliberately violating facility access control procedures that implement the RRR physical security plan, causing the licensee to violate Renewed FOL R-112, License Condition 2.C.(3).

Consequently, given the significance of the underlying issues, Dr. Krahenbuhl's position within the Reed College organization, and the deliberate nature of her actions, the NRC lacks the requisite reasonable assurance that Dr. Krahenbuhl can conduct licensed activities in compliance with the Commission's requirements and that the health and safety of the public will be protected if Dr. Krahenbuhl were permitted at this time to be involved in NRC-licensed activities. Therefore, (1) License No. SOP-70678-1 issued to Dr. Melinda Krahenbuhl pursuant to 10 CFR Part 55 is hereby suspended for 3 years;

and (2) Dr. Krahenbuhl is further prohibited from any involvement in NRC-licensed activities for a period of 3 years from the effective date of this Order. Additionally, Dr. Krahenbuhl is required to notify the NRC of her first employment in NRC-licensed activities following the prohibition period. Furthermore, I find that the significance of Dr. Krahenbuhl's willful misconduct described above is such that the public health, safety, and interest require that this Order be effective on the date of issuance.

IV.

Accordingly, pursuant to sections 104c, 161b, 161i, 182 and 186 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR 2.202, 10 CFR 50.5, and 10 CFR 55.61, IT IS HEREBY ORDERED, EFFECTIVE UPON THE DATE OF ISSUANCE, THAT:

1. NRC License No. SOP-70678-1 issued to Dr. Melinda Krahenbuhl pursuant to 10 CFR Part 55 is suspended for 3 years;
2. Dr. Melinda Krahenbuhl is prohibited for 3 years, from the effective date of this Order, from engaging in, supervising, directing, or in any other way conducting NRC-licensed activities (with a limited exception as explained more fully below). NRC-licensed activities are those activities that are conducted pursuant to a specific or general license issued by the NRC, including, but not limited to, those activities of Agreement State licensees conducted pursuant to the authority granted by 10 CFR 150.20. In relation to NRC-licensed activities at the RRR facility, for a period of 90 days after issuance of this order, Dr. Krahenbuhl is

permitted to respond to questions from the President of the College (i.e., Level 1 individual responsible for the reactor facility's license), Dean of the Faculty, or the Vice President & Treasurer of the College, for the limited purpose of facilitating the safe and orderly transition of RRR-related licensed activities;

3. If Dr. Melinda Krahenbuhl is currently involved in NRC-licensed activities at any other NRC licensee, contractor, vendor, or any other organization, she must immediately cease those activities and inform the NRC of the name, address, and telephone number of the NRC licensee, contractor, vendor, or any other organization, and provide a copy of this order to those entities;
4. For a period of 1 year after the 3-year period of prohibition has expired, Dr. Melinda Krahenbuhl shall, within 20 days of acceptance of her first employment offer involving NRC-licensed activities, as defined in paragraph IV.2 above, provide notice to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, of the name, address, and telephone number of the employer or the entity where she is, or will be, involved in the NRC-licensed activities. In the notification, Dr. Krahenbuhl shall include a statement of her commitment to compliance with regulatory requirements and the basis why the Commission should have confidence that she will now comply with applicable NRC requirements.

The Director, Office of Enforcement, may, in writing, relax or rescind any of the above conditions upon demonstration by Dr. Melinda Krahenbuhl of good cause.

V.

In accordance with 10 CFR 2.202, Dr. Melinda Krahenbuhl must submit a written answer to this Order under oath or affirmation within 30 days of its issuance. Dr. Krahenbuhl's failure to respond to this Order could result in additional enforcement action in accordance with the Commission's Enforcement Policy. In addition, Dr. Krahenbuhl and any other person adversely affected by this Order may request a hearing on this Order within 30 days of its issuance. If a person other than Dr. Krahenbuhl requests a hearing, that person shall set forth with particularity the manner in which his or her interest is adversely affected by this Order and shall address the criteria set forth in 10 CFR 2.309(d) and (f). Where good cause is shown, consideration will be given to extending the time to answer or request a hearing. A request for extension of time must be directed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-001, and include a statement of good cause for the extension.

All documents filed in NRC adjudicatory proceedings, including a request for hearing and petition for leave to intervene (petition), any motion or other document filed in the proceeding prior to the submission of a request for hearing or petition to intervene, and documents filed by interested governmental entities that request to participate under 10 CFR 2.315(c), must be filed in accordance with the NRC's E-Filing rule (72 FR 49139; August 28, 2007, as amended at 77 FR 46562; August 3, 2012). The E-Filing process requires participants to submit and serve all adjudicatory documents over the internet, or in some cases to mail copies on electronic storage media. Detailed guidance on making electronic submissions may be found in the Guidance for Electronic

Submissions to the NRC and on the NRC Web site at <https://www.nrc.gov/site-help/e-submittals.html>. Participants may not submit paper copies of their filings unless they seek an exemption in accordance with the procedures described below.

To comply with the procedural requirements of E-Filing, at least 10 days prior to the filing deadline, the participant should contact the Office of the Secretary by e-mail at hearing.docket@nrc.gov, or by telephone at 301-415-1677, to (1) request a digital identification (ID) certificate, which allows the participant (or its counsel or representative) to digitally sign submissions and access the E-Filing system for any proceeding in which it is participating; and (2) advise the Secretary that the participant will be submitting a petition or other adjudicatory document (even in instances in which the participant, or its counsel or representative, already holds an NRC-issued digital ID certificate). Based upon this information, the Secretary will establish an electronic docket for the hearing in this proceeding if the Secretary has not already established an electronic docket.

Information about applying for a digital ID certificate is available on the NRC's public Web site at <https://www.nrc.gov/site-help/e-submittals/getting-started.html>. Once a participant has obtained a digital ID certificate and a docket has been created, the participant can then submit adjudicatory documents. Submissions must be in Portable Document Format (PDF). Additional guidance on PDF submissions is available on the NRC's public Web site at <https://www.nrc.gov/site-help/electronic-sub-ref-mat.html>. A filing is considered complete at the time the document is submitted through the NRC's E-Filing system. To be timely, an electronic filing must be submitted to the E-Filing system no later than 11:59 p.m. Eastern Time on the due date. Upon receipt of a

transmission, the E-Filing system time-stamps the document and sends the submitter an e-mail notice confirming receipt of the document. The E-Filing system also distributes an e-mail notice that provides access to the document to the NRC's Office of the General Counsel and any others who have advised the Office of the Secretary that they wish to participate in the proceeding, so that the filer need not serve the document on those participants separately. Therefore, applicants and other participants (or their counsel or representative) must apply for and receive a digital ID certificate before adjudicatory documents are filed so that they can obtain access to the documents via the E-Filing system.

A person filing electronically using the NRC's adjudicatory E-Filing system may seek assistance by contacting the NRC's Electronic Filing Help Desk through the "Contact Us" link located on the NRC's public Web site at <https://www.nrc.gov/site-help/e-submittals.html>, by e-mail to MSHD.Resource@nrc.gov, or by a toll-free call at 1-866-672-7640. The NRC Electronic Filing Help Desk is available between 9 a.m. and 6 p.m., Eastern Time, Monday through Friday, excluding government holidays.

Participants who believe that they have a good cause for not submitting documents electronically must file an exemption request, in accordance with 10 CFR 2.302(g), with their initial paper filing stating why there is good cause for not filing electronically and requesting authorization to continue to submit documents in paper format. Such filings must be submitted by: (1) first class mail addressed to the Office of the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Rulemaking and Adjudications Staff; or (2) courier, express mail, or expedited delivery service to the Office of the Secretary, 11555 Rockville Pike,

Rockville, Maryland 20852, Attention: Rulemaking and Adjudications Staff. Participants filing adjudicatory documents in this manner are responsible for serving the document on all other participants. Filing is considered complete by first-class mail as of the time of deposit in the mail, or by courier, express mail, or expedited delivery service upon depositing the document with the provider of the service. A presiding officer, having granted an exemption request from using E-Filing, may require a participant or party to use E-Filing if the presiding officer subsequently determines that the reason for granting the exemption from use of E-Filing no longer exists.

Documents submitted in adjudicatory proceedings will appear in the NRC's electronic hearing docket which is available to the public at <https://adams.nrc.gov/ehd>, unless excluded pursuant to an order of the Commission or the presiding officer. If you do not have an NRC-issued digital ID certificate as described above, click "cancel" when the link requests certificates and you will be automatically directed to the NRC's electronic hearing dockets where you will be able to access any publicly available documents in a particular hearing docket. Participants are requested not to include personal privacy information, such as social security numbers, home addresses, or personal phone numbers in their filings, unless an NRC regulation or other law requires submission of such information. For example, in some instances, individuals provide home addresses in order to demonstrate proximity to a facility or site. With respect to copyrighted works, except for limited excerpts that serve the purpose of the adjudicatory filings and would constitute a Fair Use application, participants are requested not to include copyrighted materials in their submission.

If a hearing is requested by Dr. Melinda Krahenbuhl or a person whose interest is adversely affected, the Commission will issue an Order designating the time and place of any hearings. If a hearing is held, the issue to be considered at such hearing shall be whether this Order should be sustained. In the absence of any request for hearing, or written approval of an extension of time in which to request a hearing, the provisions specified in Section IV above shall be final 30 days from the date of issuance without further order or proceedings. If an extension of time for requesting a hearing has been approved, the provisions specified in Section IV shall be final when the extension expires if a hearing request has not been received.

Dated at Rockville, Maryland, this 16th day of March 2020.

For the Nuclear Regulatory Commission

George A. Wilson, Director
Office of Enforcement

[FR Doc. 2020-05925 Filed: 3/19/2020 8:45 am; Publication Date: 3/20/2020]